

nitride layer 13 and increasing the concentration of the donor that decreases the in-plane lattice constant towards the interface with an AlGaN active layer 14 will be advantageous for overgrowth of thick AlGaN layers as required for growth of mirror stacks in surface emitting lasers, for example, co-doping with Si and Ge, and increasing Ge concentration towards the AlGaN interface.

Kim, K. S. et al.: "The study on the growth and properties of Mg doped and Mg-Si codoped p-type GaN" Solid-State Electronics, Sep. 1999, vol. 43, No. 9, pp. 1807-1812, XP002165928, ISSN: 0038-1101.

Yamamoto, T. et al.: "Electronic structures of p-type GaN codoped with Be or Mg as the acceptors and Si or O as the donor codopants" Journal of Crystal Growth, 1998, vol. 189-190, pp. 532-536, XP004148570, ISSN: 0022-0248.